



Fertilizers in Washington

Washington ranks third nationally in the amount of fertilizer used on lawns and gardens. With agricultural use included, over one million tons of fertilizers are added to Washington soils every year. So what do we really know about the fertilizers we use?

Fertilizers contain nutrients needed for plant growth, but they also contain non-nutritive substances such as metals. These metals can build up in the soil or leach into ground and surface waters. Recent concerns about the amount of metals in fertilizers and especially fertilizers with industrial wastes as ingredients, led to the Fertilizer Regulation Act of 1998.

In part, the law directed the Department of Ecology to review certain fertilizers before they are approved for sale in Washington State.

To date, Ecology has reviewed over 400 fertilizer products for compliance with the law. According to the law, fertilizers using waste materials (including hazardous wastes) as ingredients, must be reviewed by Ecology to ensure compliance with waste regulations.

Ecology's review process is intended to "weed out" fertilizers that may contain leachable metals from the approximately 2,800 fertilizer products that are registered for sale in Washington each year. As the first year of the fertilizer review process comes to a close, it is apparent that most fertilizers sold in the state are not waste-derived and that even waste-derived products are low in leachable metals. However, the Ecology review process that examined the level of leachable metals in fertilizers resulted in changes to at least 18 products. Makers of those products chose to use sources of raw materials with lower metal levels or simply opted to not sell that product in Washington.

Combined with the more stringent review process now conducted by the Department of Agriculture (also a result of the Fertilizer Regulation Act), Washington has the most comprehensive fertilizer review and approval process in the nation.

Also resulting from the 1998 law, Washington adopted standards limiting the amount of

Pollution Prevention Tips Fertilizer on Lawns and Gardens



Apply plant or lawn fertilizers only when plants show a need – not because you are following a schedule.



Follow instructions on the product package.



Apply less fertilizer, more often rather than a single, large application.



Use compost or organic fertilizers; they last longer and pollute less.



Try not to apply fertilizer when heavy rain threatens, most will run off anyway.

certain 'heavy' metals a fertilizer may add to the soil through normal use. The Department of Agriculture enforces these standards which resulted in a number of additional product manufacturers changing raw material sources or not registering for sale in Washington. For detailed information on Ecology's review process, Washington's metal standards for fertilizers, or data on specific fertilizer products, see Ecology's Fertilizer Database at <http://www.wa.gov/ecology/hwtr/fertilizer/>.

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Photo Processing Waste: Does it "Count" as Dangerous Waste?

If you plumb spent photographic solutions directly to an on-site silver reclamation unit, and document proper management, your business may be able to take advantage of a counting exclusion in the *Dangerous Waste Regulations* (Chapter 173-303 WAC).

"One Hour Western Photo" in Pullman used this exclusion to qualify as a small quantity generator (SQG). The former medium quantity generator (MQG) of dangerous waste had been generating more than 220 pounds of silver-bearing waste (waste code D011) per month in their photographic processing machines. When manager Steve "Kip" Prahinski began plumbing the silver-bearing waste directly from the machines to a silver recovery unit, the company qualified for the counting exclusion because:

- ☑ The waste is recycled without prior storage or accumulation,
- ☑ The shop maintains treatment logs showing the recovery unit is being properly managed,
- ☑ Effluent from recovery equipment is discharged to the sewer with the approval of the local wastewater treatment plant,
- ☑ Effluent is tested often to make sure the treatment system is functioning properly.

As a result, the spent photo-processing waste no longer needs to be "counted" as dangerous waste. Now that "One Hour Western Photo" is a small quantity generator, they have fewer regulatory and paperwork requirements.

For pollution prevention information, request a copy of "*A Guide for Photo Processors*," or contact your local regional office to learn whether this counting exclusion can help you change your generator status.

Painting Contractors Use Best Management Practices to Prevent Pollution

Ecology is working with painting contractors to identify best management practices for painting activities. These practices help painting contractors reduce waste, diminish the risk of exposure, and save money. Ecology is recommending the following methods for painting contractors. People who hire painting contractors should request these practices be used:

- ✓ **Switch to less hazardous water-based paints and coatings instead of solvent-based paints and coatings.** The variety and quality of water-based products is improving steadily, diminishing the need for solvent-based coatings.
- ✓ **Reuse materials.** Leave excess paint with the property owner for touch-up purposes. Blend similar paints and colors for use as a primer.
- ✓ **Keep track of inventory.** Tracking your inventory will help you avoid leftover paint. A tracking system will also help you use paints before they expire and become waste.
- ✓ **Recycle solvents.** Evaluate whether a distillation unit is cost effective for your operation. To determine if a still would be right for you, use Ecology's guide "*On-Site Distillation – A Guide for Choosing and Operating an On-Site Distillation Unit*." **Remember: Don't evaporate your solvents to the air. Solvents must be properly contained and recycled or disposed as dangerous waste.**
- ✓ **Manage clean-up waste.** All solvents used for clean up of equipment with petroleum or oil-based paints need to be managed properly. Decant solvents after use and reuse decanted solvents. Solids from distillation need to be managed as dangerous waste.
- ✓ **Dispose of all dangerous wastes properly.** Dangerous wastes

include, but are not limited to solvents, thinners, oil or solvent-based waste paints, spray gun clean-out solvent, and washwater that contains hazardous chemicals above dangerous waste thresholds.

- ✓ **Manage latex paint waste correctly.** Latex paint wastes and washwaters also need to be managed appropriately. Check with your county solid and hazardous waste program for information on the proper disposal of latex paint wastes. Washwater cannot be disposed on the ground, down storm drains or to septic systems. In most cases, washwater can be discharged to the sewer system. To be sure, check with your local publicly-owned treatment works. If the site is not connected to a sewer system, the washwater must be collected, and properly disposed.
- ✓ **Be prepared for spills.** Make sure that spill clean-up equipment is available at all times. If petroleum or oil-based products are spilled, the cleaned up material will need to be disposed as a dangerous waste. Check with your county solid waste program for guidance on proper disposal of non-dangerous waste spilled materials. Use these best management practices to complete painting projects while protecting the health of workers, building occupants, and the environment. For more information, contact Scott Lamb at (425) 649-7268.

Free Information

On-Site Distillation – A Guide for Choosing and Operating an On-Site Distillation Unit, publication # 94-31
A Guide for PhotoProcessors, publication #94-138R

For these or other Ecology publications, call (360) 407-6752 or e-mail your request to dzin461@ecy.wa.gov. You can also find these publications and others at Ecology's website at <http://www.wa.gov/ecology/hwtr/hwtrpubs/>

Eden Advanced Pest Technologies and Omega Pest Management are Pollution Prevention Winners

The potentially harmful effects of pesticide contamination on the environment are a concern shared by many people. So, it might be surprising to learn that two pest management companies were honored with the 1999 Governor's Award for Outstanding Achievement in Pollution Prevention. These two companies, Eden and Omega, were selected because they have employed innovative techniques to control unwanted pests, while limiting pesticide use.

Eden Advanced Pest Technologies achieved a significant reduction of pesticide use through their commitment to Integrated Pest Management (IPM). Jack Marlowe, vice-president of Eden describes IPM as, "the latest technologies in pest suppression. IPM methods stress more proactive and permanent solutions to pest problems rather than reacting to a pest crisis through the use of pesticides."

Eden's past practices relied on the use of pesticides as a first response. The IPM programs they now use follow these procedures:

- Establish inspection and monitoring,
- Use non-chemical methods as first response,
- Employ long-term preventative measures,
- Avoid automatic spraying without evidence of pests, and
- Use pesticides judiciously in concert with non-pesticide methods.

Changing the habits of technicians and customers has been the biggest barrier to overcome, according to Marlowe. "Once success is achieved, it motivates the next attempt."

Eden has helped school districts in Washington and Oregon develop IPM programs that limit pesticide use on school grounds including playing fields, classrooms, locker rooms, gymnasiums and cafeterias.



ADVANCED PEST TECHNOLOGIES

Omega Pest Management is also committed to Integrated Pest Management. Omega works to control pests while protecting the environment using the following methods:

- Ω Removing conditions that promote pests,
- Ω Giving preference to mechanical over chemical methods,
- Ω Choosing the least toxic yet effective product available, and
- Ω Targeting a smaller area instead of an entire building.

Although some of the less toxic products that Omega uses are more expensive than traditional pesticides, the company maintains a profitable bottom line by carefully monitoring the amount of product used and by giving preference to mechanical rather than chemical methods. Omega's success with IPM also qualified them for EnviroStars and Green Works, in addition to the Governor's Award.

Company owner, Todd Best sums up his business philosophy this way, "Our company, from office staff to technicians, is very passionate about the environment. One of our ways of providing outstanding customer service is by controlling pests with the use of Integrated Pest Management (IPM) techniques which allow us to keep our customers' health, property and the environment paramount."



Shoptalk on the Web

A new Internet version of *Shoptalk* was launched in May 2000. Since coming on-line, Ecology staff have improved and enhanced the usability of the web version. So, if you previously experienced problems on-line, please try again. This new version at <http://www.wa.gov/ecology/hwtr/shoptalkonline/index.html> makes it easy to:

- ✓ Scan or search *Shoptalk* to quickly find the information you need.
- ✓ Print an article or an entire issue.
- ✓ Link to related information
- ✓ Contact Ecology staff via e-mail.

Visit *Shoptalk* on-line and give us your feedback. Complete the questionnaire to become eligible to win a pass to one of Ecology's Dangerous Waste Generator Workshops (a \$40 value). Our first two winners have already been selected. Congratulations to Jennifer Podenski, Cadman, Incorporated and Melanie May, Lakehaven Utility District! More winners will be selected in the fall and winter issues of *Shoptalk*.

Subscribe to *Shoptalk* on-line and you will receive an e-mailmessage with a direct link to the Internet site for future issues. For more information, contact Joanne Phillipson at (360) 407-6740 or joph461@ecy.wa.gov.

Rule Amendments Effective

Amendments to Washington's *Dangerous Waste Regulations*, Chapter 173-303 WAC went into effect June 10, 2000. A Focus Sheet highlighting the changes will be mailed to all sites with a RCRA Site ID Number. The complete text of the rules is available at <http://www.wa.gov/ecology/biblio/wac173303.html>. If you would like a copy of the new regulations, call Dave Zink at (360) 407-6752 or e-mail dzin461@ecy.wa.gov.

Winners of the 2000 Governor's Award for Achievement in Pollution Prevention will be announced in the fall issue of Shoptalk.

Q Do I need to designate the used oil I generate as a dangerous waste?

A You don't have to designate your used oil if it gets recycled. However, you must follow the used oil prohibitions and the "no-mixing of dangerous waste" requirements as described in WAC 173-303-515(5). Most of those prohibition determinations can be made based on your generator knowledge. However, the prohibition against extremely hazardous waste (EHW) being managed as used oil might require testing. Full dangerous waste designation is required only when the used oil is to be disposed.

Q Can a generator burn other people's used oil in their space heaters?

A Yes, but there are limitations. Generators can burn used oil from households (do-it-yourself oil changers). Generators can also burn used oil from other facilities that they own at a chosen location known as an "aggregation point" — as long as the used oil, space heater, and aggregation point meet all applicable regulations. A generator may not burn used oil from other businesses.

Note: Do not mix other wastes, solvents, and cleaners with used oil. Adding even a small amount of chlorinated product can cause the whole batch to become hazardous waste.

Q Do I need to label my drums/pails/containers of used oil?

A Yes. The containers must be labeled or marked clearly with the words "Used Oil." For many years, Ecology has recommended marking containers as "Used Oil ONLY" because that will help the generator to make sure that employees do not mix any other waste with the oil. A sign posted near the used oil containers is not sufficient for this purpose — the label needs to be on the container.

Q What is the time limit for on-site storage of used oil?

A Facilities that generate used oil do not have a time limit for on-site storage. However, processors and re-refiners have a 90-day on-site storage limit — they must move the used oil into an active recycling process within 90 days after receiving it.

Ecology Contacts

Remember, your business is liable for all hazardous wastes generated. If you are uncertain about your responsibilities as a hazardous waste generator, call your nearest Ecology office and ask for a hazardous waste specialist. For information on reducing or recycling hazardous waste, ask for the toxics reduction staff, also at the following numbers:

Bellevue: (425) 649-7000

Lacey: (360) 407-6300

Yakima: (509) 575-2490

Spokane: (509) 456-2926

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Shoptalk

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